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operably linked to a heterologous polynucleotide sequence, or a complement thereof, encoding a LEC1 polypeptide, comprising a subsequence at least 80% identical to the B domain of SEQ ID NO:2, wherein the polynucleotide sequence is heterologous to any element in the expression cassette, and wherein the polynucleotide modulates embryo development when the polynucleotide is expressed in a plant.

encoding a LEC1 polypeptide comprising a subsequence at least 80% identical to the B domain of SEQ ID NO:2, with the proviso that the nucleic acid is not clone MNJ7 (Genbank Accession No. AB025628), wherein the LEC1 polypeptide modulates embryo development when expressed in a plant.

- 35. (Amended) A host cell comprising an expression cassette according to any of claim 1 or a nucleic acid molecule according to claim 21, wherein the expression cassette or nucleic acid molecule is flanked by a heterologous sequence.
- 42. (Amended) A method of introducing an isolated nucleic acid into a host cell comprising:
- (a) providing an expression cassette according to any of claim 1 or an isolated nucleic acid according to claim 21; and
- (b) contacting the expression cassette or nucleic acid with the host cell under conditions that permit insertion of the nucleic acid into the host cell.

(Amended) A method of modulating embryo development in a plant, the method comprising,

introducing into the plant an expression cassette containing a plant promoter operably linked to a heterologous LEC1 polynucleotide, the heterologous LEC1

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polynucleotide encoding a LEC1 polypeptide comprising a subsequence at least 80% identical to the B domain of SEQ ID NO:2; and

detecting a plant with modulated embryo development.

transcription results in the induction of embryonic characteristics in a plant.

- 55. (Amended) The method of claim 47, wherein modulating transcription results in the induction of seed development.
- 70. (New) The expression cassette of claim 1, wherein the B domain comprises a polypeptide sequence between amino acid residue 28 and residue 117 of SEQ ID NO:2.
- 71. (New) The isolated nucleic acid of claim 21, wherein the B domain comprises a polypeptide sequence between amino acid residue 28 and residue 117 of SEO ID NO:2.
- 72. (New) The host cell of claim 35, wherein the B domain comprises a polypeptide sequence between amino acid residue 28 and residue 117 of SEQ ID NO:2.
- 73. (New) The method of claim 47, wherein the B domain comprises a polypeptide sequence between amino acid residue 28 and residue 117 of SEQ ID NO:2.

## **REMARKS**

## 1. Status of the claims

Claims 1, 21, 35, 42, 47, 54, and 55 are amended and claims 70-73 are amended. Claims 4-8, 10-20, 23-27, 30-34, 37-38, 40-41, 44-45, 50-53, 56-57, 59-62 and 64-68 were withdrawn from consideration by the Examiner. Thus, claims 1-3, 9, 21-22,